TROUBLE SHOOTING TIPS

Issue T-30

The following Trouble Shooting Guide should be supplied to each RISO Technical Representative. The purpose of this information is to provide the field with help in trouble shooting problems that they may encounter and their solutions.

Problem: No copy or half a copy after master making.

Cause: Previous master has not been disposed properly causing double master on drum or master wrap.

Solution:
1) Master removal hooks need adjustment.(Page 3-36 Tech Manual)
2) Check the condition of the mylar sheet attached to the clamp plate. Replace if it is damaged or deformed. (Fig. 8 Item #16 in your parts book).
3) Check the condition of the "Sticker Sheet" mounted on the clamp plate base. "Sticker Sheet" The normal condition of the sheet should be sticky. If not wash with alcohol or replace (Fig. 8 Item #27 in your parts book).

Problem: Used master wrapping on upper discharge roller.

Cause: Used master not disposed of properly to disposal box.

Solution:
1) Check to insure the upper discharge roller has modification T-28 "Upper Roller Cover" (See Technical Information Issue T-28).
2) Clean upper discharge roller with a dry rag.
3) Check the angle of the back plate of the disposal box. It should be flush with the side frame of the machine. Adjust the angle if necessary.

Problem: Light copy or fuzzy copy.

Cause: Pressure roller has weak pressure or thermal head pressure is weak during master making.

Solution:
1) Check the adjustment of the pressure lever and hook (Page 3-23, 3-24 in Tech. Manual).
2) Check the pressure roller unit. Usually check the pressure roller and the bearings. If necessary clean or replace worn parts. Also check the pressure shaft and the two spiral pins that attach the pressure roller support to the pressure shaft. These pins could be bent or broken. Replace if necessary (See page A-2 Tech. Manual to order).

3) Check the ink supply in the drum for proper volume.
4) Check thermal head pressure and condition of Write Roller. For light copy on one side (also see cutter problems for light copy on one side).

Problem: No ink supplied to drum.

Cause: Ink pump system fault.

Solution: 1) Check to insure that ink system is working properly. First check the ink sensor. To check use your checkerboard and page 3-4 in your Tech. Manual. If a checkerboard is unavailable, move the ink sensor out so it is not touching ink bead and run a few copies. After, re-check the ink bead it should be longer. If sensor is not working properly on:

1) The new drum P.C.B. you can replace R-14 with a 36 Kohm resistor and re-check operation.

2) The old drum P.C.B. It will be necessary to replace the drum P.C.B.

NOTE: To determine which type Drum P.C.B. you have, refer to Technical Information Issue T-26. Before repairing or replacing the Drum P.C.B. always check your connectors and power supply to the Drum P.C.B.

2) Check the ink pump motor. To check on the 2700 and 2500 you can use the service man mode page 3-2 in the tech. manual. On the 3500 you can check by moving the ink sensor away from the ink bead and running a few test low copies while listening for the motor action. If not functioning properly, check your connectors and use a meter to check the motor and power supply to the Drum P.C.B. and ink pump.

Problem: Paper Jam Right.

Cause: Spring tension of the seperator is too weak. Seperator gap to the drum not set correctly. Paper receiving sensor 1 or 2 not working properly.

Solution: 1) On the U.L. listed machines a plate has been attached to the seperator shaft. The extra weight on the shaft causes a slower movement of the seperator. To correct this problem change the spring tension by locating the seperator spring on the rear side frame (back) of the machine, loosen the spring mount and rotate it so there is more tension on the spring mount 180.

NOTE: Mount position has been already changed on:

- o 2500 with serial numbers higher than 90460201
- o 3500 with serial numbers higher than 90440001

2) Check the seperator adjustment page 3-26 in your tech. manual.

3) Check the operation of paper receiving sensor 1 and 2. To check use your checkerboard or page 3-46 in your tech. book.

4) Check the position of the U Sheet mounted on the drum screen. The correct position procedures can be found in Technical Issue Number T-24.

Problem: Paper Jam Left.

Cause: Multiple.

Solution: 1) First check the normal adjustments of the first and second paper feed area. Page 3-5 through 3-12 in your tech. manual.

2) Timing - check the timing of the machine and correct if necessary page 3-19 in your tech. manual. If the timing belt is jumping time please check the following:

A. Check to insure correct belt tension. Check the condition of the belt itself. If the machine has had a serious jam such as a jam of the disposal hooks and the clamp plate, it is possible that the teeth have been damaged. In this case replace the timing belt.

B. Check the vertical positioning motor and pully, and pully slide plate front and base to see that they are not worn or damaged. Check to insure that when the vertical height positioning motor is in the centre position that approximately 11mm of threads are showing on the shaft. If this is incorrect the shaft may bind on the base plate when the vertical height is raised. The slide plate front and the base to bend and loosen the tension of the timing belt. If they are bent replace them.

C) Check the timing belt tension setting. It should be set at the 2nd or 3rd dot, with the tension collar. If the tension is too tight it may also cause the front slide plate and the base plate to bend and cause the timing belt to jump. If the tension setting can be set to the 4th dot or higher, it may be an indication that the slide plate is bent or that the belt is stretched or damaged.

3) Check the one way bearing on the guide roller. If dirty or oil has been applied the bearing may be slipping. To correct wash the gear and bearing in alcohol and lightly scuff the shaft where the bearing is mounted. Note: The slipping of this gear may also cause the printed copy registration to change eratically.

Problem: T1 service call main motor lock.

Cause: Drum rotation incorrect.

Solution: This service code can be reset with the jam clear button. It is important to determine if there is a problem with the machine or if the problem is in the power source to the machine before servicing. If the T1 code cannot be cleared check the following:

1) Check to insure that the magnet A has not worked itself loose or fallen off.

2) Check the magnet A sensor to determine if it is correctly adjusted and functioning properly. See page 3-25 in your tech. manual for proper adjustment and use a checker board or meter to check the sensor itself.

3) Check to insure that the drum has no visable wear marks on it. Wear marks are an indication that the drum is rubbing or hitting something during its rotation. Also check the paper stack switch for correct adjustment. It is possible that more than one sheet of paper has been fed through the machine, causing the second paper feed or the pressure roller to slow the drum rotation.

4) Check the disposal system to insure that the clamp plate opens and closes smoothly. Also check to see if the disposal hooks are adjusted properly, if they are out of adjustment they may be rubbing on the clamp plate or may jam the clamp plate.

5) Check all the connectors and the power supply to the main motor (see page A-3 in the tech. manual). Also check the encoder sensor on the main motor itself. If the machine has the external fuse panel located in front of the P.R.I. P.C.B. check the third fuse on the top row. Also check the main motor board, on earlier main motor P.C.B. There is a Diode (D1-10 AMP) that may be shortened if a jam occurs. It may also be necessary to check fuse F1 located on the power supply P.C.B. in the suction unit.

Problem: Light copy one side, black dots on printed copy, master curl and or master wrinkle.

Cause: Cutter area problems.

Solution: 1) Light copy on one side - this may be caused by the B adjustment plate of the cutter. If the plate is adjusted too high or if the cutter is installed a little crooked, it may touch the thermal head during master making causing weak pressure. It may be necessary to reposition the cutter (page 3-31 in your tech namual) and or readjust the B plate which adjusts the loading roller (page 3-32 in your tech. manual).

2) Black dots on printed copy - is caused by the setting roller and loading roller pulling on the master material unevenly. It may be necessary to reposition the cutter (page 3-31, 3-32 in tech. manual) to insure rollers are even. Also check the thermal head pressure, it may be too strong causing the master to pull. Check the end caps of the master roll to insure that they can move freely when installed.

3) Master Curl - is usually caused when the master is fed to the drum from the cutter. Check the master feeding guide wires that are mounted on the cutter guide plate. (Illustrated on page 3-35 in the tech. manual with the adjustment of the master sensor). It may be necessary to form the guide wires to control master curl.

4) Master wrinkle - check all of the above.

NOTE: For more trouble shooting tips on the cutter please refer to technical information issue number T-12.

Problem: 3500 Original stops under read roller.

Cause: Image Scanner is not pivoting correctly.

Solution: Locate the white teflon spacer on each side of the image scanner where it mounts to the master making unit. Remove the spacer and file the spacer a little. This will allow the image scanner to pivot freely.

Please Note: This trouble shooting information has been assigned a technical information issue number T-30 to insure that the information is available to all new and future dealers. please make copies and distribute to your other locations and trained RISO tech. reps. and instruct them to enter this information into the technical information file.